

## **FACT SHEET**

### **PROPOSED AIR TOXICS REGULATION FOR THE PRINTING AND PUBLISHING INDUSTRY**

#### **TODAY'S ACTION...**

- ◆ The Environmental Protection Agency (EPA) is issuing a proposed regulation to reduce emissions of air toxics from the printing and publishing industry. Air toxics are those pollutants known or suspected of causing cancer or other serious health effects.
- ◆ The proposed regulation covers two distinct segments of this industry. Publication rotogravure printers produce saleable paper products such as catalogues, magazines, newspaper inserts, and telephone directories. Package-product rotogravure and wide-web flexographic facilities print on paper, plastic film, metal foil, and vinyl for use in products such as flexible packaging, labels, gift wrap, floor coverings, and decorative laminates. Air toxics are released from the ink systems used by these types of printers.

#### **WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?**

- ◆ The proposed regulation would reduce emissions of a number of air toxics from the printing industry, including toluene, xylene, methanol, and hexane. Air toxics emissions would be reduced from publication rotogravure printers by about 5,500 tons annually. The proposed rule would reduce air toxics emissions from package-product rotogravure and wide-web flexographic printers by approximately 2,100 tons annually.
- ◆ The proposed rule provides flexibility to industry by providing a variety of compliance options that also encourage pollution prevention.

#### **HOW IS THE PROPOSED RULE RELATED TO EPA'S "COMMON SENSE" INITIATIVE?**

- ◆ EPA's "Common Sense" Initiative involves a comprehensive examination of six industrial sectors, including the printing and publishing industry. Through this program, which was launched in 1994, EPA works with selected industries, environmental and public interest groups, State regulators and other stakeholders to improve the environment, while reducing the economic impact of its programs. The program focuses on improving and streamlining six specific areas, including regulation development,

pollution prevention, and recordkeeping and reporting.

- ◆ The proposed printing and publishing regulation incorporates many principles of the Common Sense Initiative Program. The proposal includes flexible compliance options, emphasizes pollution prevention measures, and contains simplified recordkeeping and reporting requirements.

#### **BACKGROUND**

- ◆ Under the Clean Air Act Amendments of 1990, EPA is required to regulate emissions of 189 listed toxic air pollutants. On July 16, 1992, EPA published a list of source categories that emit one or more of these air toxics. For listed categories of "major" sources (those that have the potential to emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the Act requires EPA to develop standards that will require the application of maximum achievable control technology (MACT).
- ◆ On July 16, 1992, EPA published a list of industry groups (known as "source categories") to be regulated, which included major sources in the printing and publishing industry, including publication rotogravure printers and package-product rotogravure and wide-web flexographic printers.

#### **WHO WILL BE AFFECTED BY THE PROPOSED RULE?**

- ◆ There are 27 publication rotogravure facilities and about 100 package-product rotogravure and wide-web flexography facilities nationwide that would be affected by this rule, as well as any "major" facilities built in the future.

#### **WHAT DOES THE PROPOSED STANDARD REQUIRE?**

- ◆ The proposed rule provides industry with several compliance options. Facilities may use pollution prevention methods, which allow printers to eliminate the use of toxic chemicals or substitute non-toxic chemicals for toxic ones; traditional emissions capture and control equipment; or a combination of the two compliance options.
- ◆ The proposed rule limits organic hazardous air pollutant (air toxics) emissions to 8 percent of the total volatiles used in publication rotogravure facilities; facilities that use only hazardous air pollutant-based solvents would be required to recover 92 percent of the hazardous air pollutant chemicals used each month.

- ◆ The proposal would require 95 percent overall control of all organic hazardous air pollutant emissions from presses at package-product rotogravure and wide-web flexographic facilities. Alternatively, emissions can be limited to 0.20 kilogram (kg) of organic hazardous air pollutants per kg of ink solids applied, for each press, or organic hazardous air pollutant emissions limited to no greater than 0.04 kg of hazardous air pollutants per kg of inks and other materials applied, for each press. The alternative standards can be achieved through operation of a control device, use of low hazardous air pollutant materials, or a combination of both.

#### Compliance Determinations

- ◆ All facilities would have to conduct an initial performance test for all control devices to demonstrate compliance with the overall control efficiency requirements. For continuous compliance, the following would be required: either a monthly liquid-liquid mass balance for solvent recovery systems, an overall control efficiency determination using a capture efficiency test with continuous emission monitoring; or an overall control efficiency determination using capture efficiency test and continuous monitoring or a capture system operating parameter.
- ◆ Facilities would have three years to comply with the regulation, when issued in final form. Any new facility would have to comply with the final regulation, when issued, upon startup.

#### Monitoring

- ◆ Publication rotogravure facilities - The following monitoring requirement would apply: monthly liquid-liquid mass balance or continuous monitoring and a quarterly audit of continuous emission monitors.
- ◆ Package-product rotogravure and wide-web flexography facilities - The following monitoring requirements would apply: hourly recording of the flow rate from press to control device; and continuous emission monitoring and quarterly audit of continuous emission monitors; or continuous monitoring of incinerator operating parameters, and quarterly calibration of incinerator monitoring thermocouples.

#### Recordkeeping and Reporting

- ◆ All facilities would be required to comply with the applicable recordkeeping provisions of EPA's air toxics

General Provisions rule, which was issued in February 1994.

- ◆ The proposal includes the following reporting requirements: initial notification; notification of performance tests; notification of compliance status; performance test reports; startup, shutdown, and malfunction reports; semiannual summary reports; and hazardous air pollutant use reports.

#### **HOW DOES THE PROPOSED RULE PROVIDE FLEXIBILITY TO INDUSTRY?**

- ◆ The proposed regulation allows for the use of inks, coatings, and other materials that contain low quantities of hazardous air pollutants without having to install additional control equipment. This provides a pollution prevention approach to compliance. Since most hazardous air pollutants used by printers are also volatile organic compounds (VOCs), most materials that contain low amounts of VOCs also contain low amounts of hazardous air pollutants. VOCs are the prime ingredient in forming ground-level ozone (smog). The use of materials that contain low amounts of VOCs has provided a popular, alternative method for printers to meet State and Federal VOC emission requirements without the costs of additional control equipment. The pollution prevention options in today's proposal build upon this alternative method for meeting VOC emissions requirements by extending it to hazardous air pollutants.

#### **HOW MUCH WILL THE PROPOSED RULE COST?**

- ◆ The estimated capital costs associated with the proposed rule would be \$92 million for publication rotogravure facilities, \$34 million for product-package rotogravure facilities, and \$7 million at wide-web flexography facilities.
- ◆ The estimated annualized costs for the proposal would be \$21 million for publication rotogravure facilities, \$17 million for product-package rotogravure facilities, and \$3.6 million for wide-web flexography facilities. The annual costs associated with the proposed rule could be considerably lower for facilities that use inks, solvents, and other materials that contain low amounts of hazardous air pollutants.
- ◆ The average end product price increases are estimated to be 1.3 percent for rotogravure printers and .01 percent for

wide-web flexographic printers.

**FOR FURTHER INFORMATION...**

Anyone with a computer and a modem can download the rule from the Clean Air Act Amendments bulletin board (under "Recently Signed Rules") of EPA's Technology Transfer Network (TTN) by calling (919) 541-5742. For further information about how to access the board, call (919) 541-5384. For further information about the proposed rule, call David Salman at (919) 541-0859.